

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



PATENT ABSTRACTS OF JAPAN

(11) Publication number: **2001145820 A**(43) Date of publication of application: **29.05.01**

(51) Int. Cl.

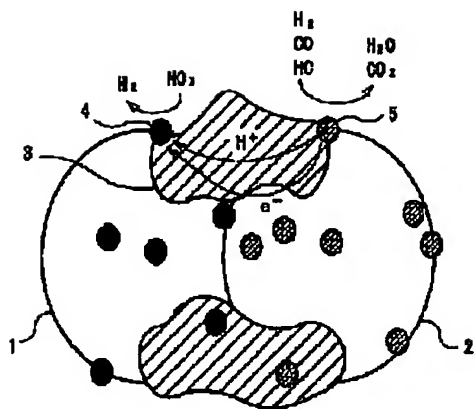
B01D 53/94**B01J 20/08****B01J 20/18****B01J 23/58****B01J 29/068****F01N 3/08****F01N 3/24****F01N 3/28**(21) Application number: **11331133**(22) Date of filing: **22.11.99**(71) Applicant: **mitsubishi electric corp**(72) Inventor: **MITSUTA KENRO
KATASHIBA HIDEAKI
NISHIYAMA RYOJI
OUCHI YASUSHI****(54) EXHAUST GAS PURIFYING DEVICE AND
EXHAUST GAS PURIFYING METHOD****(57) Abstract:**

PROBLEM TO BE SOLVED: To provide a catalyst for purifying an exhaust gas which safely functions in a lean atmosphere without the necessity to switch to a rich mode, in contrast with a catalyst used in a conventional exhaust gas purifying device designed to perform an oxidation reaction and a reduction reaction simultaneously so that NOx needs to be reduced by temporarily setting the operation in the rich mode when the operation is performed in the lean atmosphere.

SOLUTION: A catalyst A1 having a NOx absorbing substance and NOx reducing catalyst 4, a catalyst B2

having a hydrocarbon adsorbing substance and a hydrocarbon oxidizing catalyst 5 and an electrochemical catalyst containing a mixture 3 of an electron conductive substance C and an ion conductive substance D are borne on the inner face of a honeycomb. Further, piping for introducing an exhaust gas into a honeycomb and discharging it is laid. Next, electrons are migrated through the electron conductive substance C between a catalyst A and a catalyst B and at the same time, ions are migrated through the ion conductive substance D. Thus the absorbed NOx is reduced by an adsorbed hydrocarbon regardless of an exhaust gas atmosphere.

COPYRIGHT: (C)2001,JPO



- 1: 触媒A (BaCO₃を含む)
- 2: 触媒B (γ-Al₂O₃を含む)
- 3: 電子伝導性物質Cと電子伝導性物質Dとの混合物
- 4: 貴金属還元触媒粒子
- 5: 貴金属酸化触媒粒子